

INTERNATIONAL SEARCH REPORT

International application No.
PCT/AU2004/001633

A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl. 7: - C12N 15/29, C07K 14/415

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

SEE ELECTRONIC DATABASES BELOW.

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SEE ELECTRONIC DATABASES BELOW.

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPIDS, MEDLINE, CAPLUS, AGRICOLA, BIOSIS, EMBL, SWISSPROT : deschampisia, festuca, lolium, antifreeze, ice recrystallisation, SEQ ID 128, SEQ ID 102, SEQ ID 17.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	KUIPER, M. J., et. al. (2001) A Theoretical Model of a Plant Antifreeze Protein from <i>Lolium perenne</i> . Biophysical Journal 81:3560-5. (see Abstract, Table 1 and Figures 2 and 3)	4-6, 9-15, 24-27.
X	PUDNEY, P. D. A., et. al. (15 February 2003) The Physico-chemical characterization of a boiling stable antifreeze protein from a perennial grass (<i>Lolium perenne</i>). Archives of Biochemistry and Biophysics 410:238-45. (see Abstract, and Materials and Methods)	4-6, 9-15, 24-27.
X	EMBL Accession number AJ277399.1 (29-APR-2000). <i>Lolium perenne</i> partial mRNA for ice recrystallisation inhibition protein. Sidebottom, C.M.	4-6, 9-15, 24-27.
P,X	WO 2004/022700 A2 (GENESIS RESEARCH AND DEVELOPMENT CORPORATION LIMITED et. al.) 18 March 2004	4-6, 9-20, 24-27.

☒ Further documents are listed in the continuation of Box C

☒ See patent family annex

* "A"	Special categories of cited documents: document defining the general state of the art which is not considered to be of particular relevance	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E"	earlier application or patent but published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O"	document referring to an oral disclosure, use, exhibition or other means	"&"	document member of the same patent family
"P"	document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search 5 January 2005	Date of mailing of the international search report 21 JAN 2005
Name and mailing address of the ISA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaaustralia.gov.au Facsimile No. (02) 6285 3929	Authorized officer ALISTAIR BESTOW Telephone No : (02) 6283 2450

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	ATICI, Ö., et. al. (Dec. 2003) Antifreeze proteins in Higher Plants. <i>Phytochemistry</i> 64:1187-96. (see Fig. 5)	4-6, 9-15, 24-27.
A	GIDEKEL, M., et. al. (2 September 2003) Identification and characterisation of three novel cold acclimation-responsive genes from the extremophile hair grass <i>Deschampsia antarctica</i> Desv. <i>Extremophiles</i> 7:459-69.	1-3, 7-8, 21-23, 27.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/AU2004/001633

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report	Patent Family Member
WO 2004022700	US 2004146884
Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.	
END OF ANNEX	